# KNOWLEDGE TRANSFER STRATEGY Department of Transportation DELPHI Program



Author: DELPHI Program Management Team

Creation Date: March 10, 1998 Last Updated: 5/28/98 2:20 PM

Control Number: PP050

Version:

# **Contents**

Contents	i
Introduction	1
Purpose	1 1
Scope & Application	1 1
Related Documents.	1 1
Knowledge Transfer Strategy	
Program Organization	3
Formal Training.	4
Hands-on Activities	5
Knowledge Transfer Assessment	7

#### Introduction

#### **Purpose**

This document outlines the methods that will be used to transfer knowledge from the Oracle consultants to the DELPHI staff members. The strategy's intent is to position the DOT to where they will be able to operate and maintain the DELPHI system after the implementation is completed.

#### **Background**

It is a stated assumption in the DELPHI Program Charter that the DOT and OA participants, through participation in this program, will gain extensive insight and knowledge into the suite of Oracle Federal Financial Applications and the Oracle AIM methodology. Another stated assumption is that consulting support is a temporary resource for the DELPHI Program. For DOT to successfully support and manage the future Oracle Applications environment, it is incumbent upon DELPHI Program Management to ensure that the knowledge transfer of Oracle Applications functional and technical aspects takes place.

### **Scope & Application**

This document defines the knowledge transfer strategy for the DELPHI Program. This knowledge transfer strategy will be implemented by DELPHI Program Management during program start-up, and will be administered throughout the implementation of the DELPHI Program. This document contains the following sections:

- Knowledge Transfer Strategy
- Program Organization
- · Formal Training
- · Hands on Training
- Knowledge Transfer Assessment

#### **Related Documents**

- 1. Program Charter for the DELPHI Program.
- 2. Quality Plan for DELPHI Program.

# **Knowledge Transfer Strategy**

One of the critical success factors for the DELPHI Program is the effective transfer of knowledge between the Oracle consultants and DOT program team members. This transfer of knowledge will empower the DOT program team members with the skills necessary to participate in the pilot and OA deployment implementations, and to perform future support and administration of the Oracle solution.

This section outlines the strategy that the DELPHI Program Management will take to enable knowledge transfer of Oracle Applications functionality and technology skills from the Oracle 

Program Organization - Organizing the DELPHI Program teams to have Oracle consultants working closely with DOT team members on every aspect of the program.

Formal Training - Training will be an integral component of the knowledge transfer strategy. Three formal training sessions will be conducted for the DELPHI staff. The first set of sessions will be introductory training which will cover the basic functionality of the Oracle applications being implemented at DOT. The second set of sessions will be advanced training which will cover the more complex functions and capabilities of the Oracle applications being implemented at DOT. The third set of training sessions will be dedicated for technical training which will provide DELPHI team members with skills necessary to maintain and support the DELPHI system technically.

Hands-on Activities - In addition to formal training sessions, the DELPHI staff will be engaged in comprehensive hands-on activities throughout the implementation of DELPHI. This hands-on activity will include participation in documenting business requirements, development of business requirements scenarios, execution of those scenarios during the Solution Demonstration Labs, and participation in the design and build of the DELPHI solution. This hands-on activity will provide the DOT staff with the fundamental knowledge needed to implement, operate, and support the Oracle applications within the DOT environment. Because the Oracle consultants will be working closely with the DOT team members throughout the program, it will also facilitate the transfer of knowledge from the Oracle consulting staff.

**Knowledge Transfer Assessment -** To measure the knowledge transfer from the Oracle consultants to the DELPHI staff, two types of periodic assessments will be instituted. The first type of assessment will involve the DELPHI staff members assessing their own level of skills with the Oracle applications. This can be used to gauge the level of confidence that the staff has with their basic knowledge of the system. The second assessment will involve the Oracle consultants reviewing the DELPHI staff members level of knowledge. This assessment will be used to verify that the Oracle consultants feel that the individual DOT staff members can operate and maintain the applications properly. Both types of assessments will be completed mid-way and at the conclusion of each SDL and during the build phase. Naturally, the level of knowledge is expected be more advanced after the second SDL than the first, therefore the assessment will take that into account.

# **Program Organization**

During the formulation of the DELPHI Program work plan, individual tasks were estimated and developed with the assumption that Oracle and DOT would be working "shoulder to shoulder" on most tasks. This approach, included in the task estimates, provides the forum for knowledge sharing during the DELPHI Program. For example, the plan specifies that the Oracle and CSC consultants lead a group of DOT Functional Systems Analysts and the Business Process Group Leads during the Execute SDL - Federal 1.1 and Federal 2.0 tasks. These two tasks, in particular, will facilitate how the new applications will be designed, built and implemented in the DOT environment and meet the Global Design and Global Build requirements. The interaction between these groups will promote the transfer of knowledge because the bulk of the analysis work will be performed by the DOT team members with the leadership and guidance from the Oracle consultants.

The following table illustrates five examples of how the DOT staff has been grouped with the Oracle consultants in the program work plan to promote the knowledge transfer:

Type of Skill	DOT Roles	Oracle Roles
Functional	Business Process Group	Application Specialist
Grouping	Lead	
Functional	DOT Functional Specialists	Application Specialist
Grouping		
Technical Grouping	DOT Application	Application Technical Analyst
	Administrator	
Technical Grouping	DOT Systems Analyst	Application Technical Analyst
Technical Grouping	DOT Database	Oracle Database Administrator
	Administrator	

# **Formal Training**

As part of the development of the DELPHI Program work plan, two formal training sessions on the Oracle applications will be conducted for the DELPHI staff. These training sessions will be used to assist the DELPHI staff in the execution of the two Solution Demonstration Labs.

Introductory Training - Training sessions will be conducted to introduce the basic concepts of the Oracle applications which will be implemented at DOT. The knowledge gained from these sessions will be used by the participants during the execution of the first Solution Demonstration Lab. The following items are examples of sessions which will be part of the introductory training:

- System Basics Log On and System Navigation
- Define a Set of Books Define Value Set, Accounting Flexfield, Segment Values
- General Ledger Basics Enter and Post Journals, Inquire an Account, Execute and print a standard report
- Accounts Payable Basics Manage Suppliers, Process Invoices, Process Payments
- Purchasing Basics Create and Maintain Purchase Orders, Receive Goods, Perform Inquiries
- Fixed Asset Basics Define Asset Information, Manage Assets, Calculate Depreciation
- Accounts Receivable Basics Manage Customers, Maintain Items, Process Invoices, Apply **Payments**

Advanced Training - Near the end of the first Solution Demonstration Lab, a second round of Oracle application training will be conducted. This training will introduce to the DELPHI team advanced concepts and procedures within the Oracle applications. The following items are examples of sessions which will be part of the advanced training:

- Table Setup Definition and maintenance of table values in the Oracle applications
- Vendor Merge Detailed procedures and operations of the Vendor Merge
- Recurring Journals Establishment and execution of Recurring Journals
- Consolidation between different sets of books Execution of the Consolidation process

If available at the time the courses are given, this training may include "delta" training between the Release 10.7 Federal 1.1 and Release 11 Federal 2.0.

Technical Training - During both Introductory and Advanced training sessions, technical training will be included. This technical training will provide the appropriate DELPHI team members with the following skills:

- Database and Web server administration and performance tuning
- Application system administration functions
- Build and tune queries using SQL and other Oracle query tools

#### **Hands-on Activities**

As addressed in the Program Organization section, the DELPHI staff will be working with the Oracle consultants on a daily basis. This interaction is designed to facilitate the transfer of knowledge to the DOT staff through informal question and answer sessions as well as participation in tasks from the DELPHI program work plan. Therefore, through this hands-on participation and informal one on one interaction, the DELPHI staff will have the opportunity to gain knowledge in the design, build, and testing of the DELPHI system at DOT.

As part of this hands-on activity, major tasks from the DELPHI Program work plan where knowledge transfer will take place have been identified in the following items:

- Introduce Future Business Function Model The DELPHI staff will work with Oracle consultants to document the process and functions which will be included in the new DELPHI system. This gives the DELPHI staff members a basic understanding of the functionality that is included in the DELPHI system.
- Create Business Requirements Scenarios The DELPHI staff will develop the scenarios to be executed during the first Solution Demonstration Lab. This task provides the DELPHI staff members an introductory understanding of how the Oracle Applications will satisfy the DOT's requirements.
- Prepare SDL/Mapping Instance The DELPHI staff will participate in establishing and loading data for the first SDL environment. This will include the setup of flexfield definitions, and values. This task provides the DOT Technical Infrastructure Group an introduction of what is needed to install and configure the Oracle applications in their environment.
- Execute SDL1 The Business Requirements Scenarios generated earlier will be executed on the system by the DELPHI staff with assistance from the Oracle consultants. These scripts will encompass all aspects of the setup, design, and operation of the new DELPHI system. Any and all issues with the applications will be identified during this task. This task also gives the DELPHI staff the opportunity of hands on interaction with the Oracle applications and will facilitate the transfer of knowledge.
- Refine Business Requirements Scenarios Based on the outcomes from the first Solutions Demonstration Lab, the DELPHI staff will work with the Oracle consultants to refine the business requirements scenarios. This task will include any items which may not have been addressed during the first SDL or will reflect new functionality that is included in the new release of the Oracle Federal Financial applications. It will also include any comments and feedback from the Operating Administrations review of the first SDL. This task reinforces the Business Process Groups understanding of how the Oracle applications satisfy the DOT's needs. It also introduces them to the new web enabled Oracle applications.
- Re-Prepare SDL Mapping Environment The DELPHI staff will participate in establishing and loading the second SDL environment. This will include establishing table elements and values necessary to successfully operate the new release of the Oracle Federal financial applications. This task introduces the DOT Technical Infrastructure Group to the installation and configuration procedures for the new Oracle web enabled applications.
- Execute SDL2 The DELPHI staff will execute the refined Business Requirements Scenarios using the new release of the Oracle financial applications, Release 11, Federal 2.0. As with the first SDL, the staff will participate in the setup, design, and operation of the DELPHI applications. All issues and gaps identified during the first SDL must be resolved during this task through software configuration and business process reengineering. This task is used as hands on training for the DOT Business Process Groups. They will work with the

- new web enabled applications on a day to day basis learning how the Oracle applications meet the DOT specific requirements.
- Create Interface Modules The Operating Administration staff will create any data reformatting modules which are necessary for interfacing their external system data into the DELPHI system. The DELPHI interface strategy is based on using the existing Oracle Open Interface functionality which comes delivered with the software. This task introduces to the Operating Administration and DELPHI Project Team the necessary skills of how to interface external data into the DELPHI system. These skills are also required for the Pilot as well as all of the different OA roll out deployments.
- Perform Conversion Validation Test The DELPHI staff will validate and verify the successful conversion of the sample data objects from DAFIS to DELPHI. During this task the DELPHI staff will mimic the entire flow of the converted business object through the Oracle Applications. Again, this task reinforces the DELPHI staff with the understanding of the proper flow of an individual business object within the Oracle applications.
- Perform Systems Integration Testing The DELPHI staff will test how all of the Oracle applications interact with each other. The DELPHI staff will not only test the software but also test how their proposed business processes interacts with the software, thereby simulating business operations. This test is used to gauge how well the DELPHI staff members have learned over the life of the project because this task demonstrates their knowledge of how all of the different applications operate in an integrated fashion.

## **Knowledge Transfer Assessment**

A knowledge transfer assessment process has bee put in place to verify that the knowledge transfer is taking place and that the DOT resources are learning the Oracle applications both functionally and technically. This assessment process will be employed at key points in the DELPHI program. During the Pilot (Phase 1), the assessments will be made mid-way and at the end of each SDL and periodically during the build phase. This assessment process will consist of two major activities. These activities include:

**Periodic Self Assessments** - During the implementation of the DELPHI Program periodic self assessments will be performed by the DELPHI staff. These self assessments will be used as a tool to identify and evaluate if staff members are comprehending their functional and technical responsibilities within of the Oracle applications. These assessments will be administered during different phases of the program. Therefore, identifying those staff members who may require additional assistance or training before trying to have the staff member tackle more complex functionality in the applications.

Staff Assessments from Oracle Consultants - In addition to self assessments, periodic assessments will be administered by the Oracle consultants in charge of each business process group. These assessments will grade the DOT staff members comprehension and knowledge of the business process area that they are assigned to. If the staff member is identified as being deficient in the required knowledge to move on to more advanced topics of the applications, additional training or instruction may be required. Again, like the self assessments, the staff assessments will be administered periodically during the DELPHI Program.

Two important components of the assessment process are described below. These components are how the transfer of knowledge is going to be measured and what actions are to be taken if a DELPHI staff member is identified as needing additional assistance.

Measurement Criteria - Measurement criteria has been established to accurately gauge the transfer of knowledge. This measurement criteria is based on the responses from the two different knowledge transfer assessments which were prepared by the DELPHI staff member and the Oracle Consultant. The average score from each assessment will indicate whether the DELPHI staff member is learning and understanding the information passed to them from the Oracle consultant. The following table illustrates the measurement criteria for the knowledge transfer assessments:

Score	Definition	Action
80 or above	Knowledge Transfer has taken place	No action necessary
65 - 79	An average amount of knowledge transfer has taken place	Minor adjustment needed
0 - 64	Little or no knowledge transfer has taken place	Major action needed

Corrective Actions - Based on the scores received from the knowledge transfer assessments, no action, minor action, or major actions may be required. To evaluate the reasons why the staff member received an average or below average score, the DOT Project Manager will meet with the staff member and their Business Process Group Lead to understand the situation. Based on

this interview, the DOT Project Manager will recommend the appropriate corrective action. The following are examples of situations and possible corrective actions which can take place:

**Situation**: A staff member receives a score of 70

Possible Corrective Action: Identify the areas where the staff member needs improvement. Pair this person with another DELPHI staff member within their business process group who has received an 80 or above. Have the partner supplement the staff members knowledge on areas which they need improvement.

**Situation:** A staff member receives a score of 60

Possible Corrective Action: Identify the areas where the staff member needs improvement. Pair this person with the Oracle Consultant within their business process group. Specifically have the staff member concentrate on the areas which they need improvement. As the staff member progresses, have them pair with another DELPHI staff member in their business process group. Again, have the staff member work on areas where improvement is needed.

Situation: Several staff members within the same business process group receives a score below 65

Possible Correction Action: Speak to the Business Process Group Lead and the Application Specialist for the group. Evaluate if there is a communication problem between the Application Specialist and the business process group members. Also, interview the staff members on where they feel the issues are. If appropriate, assign a new Application Specialist if it is identified that effective communications are not happening.